

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.: **10/695,032**
Inventor: **Hsin-Fu Huang**
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Title: **Cutter Of Juicer**

Examiner: **Jason D. Prone**
Art Unit: **3724**

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Sir:

AMENDMENT A

In response to the Office Action mailed **02/16/2006**, please amend the above-identified application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Abstract begin on page 5 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 6 of this paper.

Remarks begin on page 7 of this paper.

AMENDMENTS TO THE SPECIFICATION:

Page 1, amend paragraph [0003] as:

[0003] In the structure of a conventional cutter of a juicer, a blade is arranged on two opposite sides of the central shaft respectively. ~~Since these~~ The two blades mounted on the central shaft are positioned at the same height level, irrespective of their ~~shapes,~~ either straight or curved, when reaming food, in addition to their curved shape. When the juicer is used to ream food, because of the simple configuration, the blades always irritate and crush the food only along the same path at the same height level. As a result, it is level, which is considered lack of efficiency and requires ~~in need of~~ a longer time to complete a crushing ~~the crush~~ job.

Page 1, amend paragraph [0004] as:

[0004] The primary object of the present invention is to provide an improved cutter of a juicer with a better working efficiency than a conventional when it is operated at one, when working under a same rotation speed.

Page 1, amend paragraph [0005] as:

[0005] A secondary object of the present invention is to provide an improved cutter of juicer with a better working efficiency, ~~by which saving power to obtain economic benefit is possible~~ to reduce power consumption.

Page 2, amend paragraph [0006] as:

[0006] In order to realize ~~mentioned~~ the above objects, the juicer cutter in accordance with the present invention is constructed by distributing three arcuate blades in

equiangular positions and at different horizontal levels, in which each blade is provided at a convex side thereof with a plurality of serrate knife teeth for reaming foods rapidly when the blades are driven to rotate.

Page 2, amend paragraph [0007] as:

[0007] ~~When compared with~~ In comparison with a conventional juicer cutter, the juicer cutter of the present invention presents ~~would present~~ a better working efficiency in reaming foods because of the arcuate blades spaced in equiangular positions in a circle to therefore secure an excellent balance for feeling and the serrate knife teeth thereof.

Page 3, amend paragraph [0016] as:

[0016] As shown in Figures 1, 2A, and 2B, a cutter 10 of juicer in accordance with the present invention comprises a head portion 103 fixed to a top end of a central shaft 101, in which an external thread 1011 is formed on a bottom end of the central shaft 101. A first blade 105, a second blade 107, and a third blade 109 ~~that are shaped identically~~ are fixed peripherally to the head portion 103 at different positions, namely, the first blade 105 at the lowest position, the second blade 107 at the second lowest, and the third blade 109 at the highest, so that the knife points of those three blades 105, 107, 109 move in an approximate helical locus. The blades 105, 107, 109 all are arc-shaped and provided at a convex side with a serrate knife-edge 1051, 1071, 1091, respectively. The external thread 1011 of the central shaft 101 is engageable with a motor of the juicer (not shown) for driving the blades 105, 107, 109.

Pages 4-5, amend paragraph [0021] as:

[0021] The first, second, and third blades 105, 107, 109 and the central shaft 101 are assembled by spacing three pieces of positioning pins in equiangular positions (120°) uniformly in molds for forming the head portion 103. ~~The 103, then setting the first, second, and third blades 105, 107, 109~~ are set into the molds in the manner that the small holes 1054, 1074, 1094 in the respective blades 105, 107, 109 are penetrated through and positioned by those three positioning pins. ~~The pins, then putting the top end of the central shaft 101 is put in the molds too, and injecting with and~~ a plastic material is injected to form the head portion 103. ~~The plastic 103 and meanwhile, allowing the material is allowed~~ to enter the space among the protruding blocks 1053, 1073, 1093 in the central holes 1052, 1072, 1092 of the blades 105, 107, 109 to combine them together, also with the central shaft 101, to complete the assembly of the juicer cutter 10 of the present invention.

Page 5, between paragraphs [0021] and [0022], add the following new paragraph:

It should be noted that in the present invention, the arc-shaped serrate knife-edge 1051, 1071, 1091 formed on the convex arcuate side of each of the three blades 105, 107, and 109 has a different curvature as shown in Figures 3A-3C. Each arc-shaped serrate knife-edge forms a different included angle between the flat back side and tail end of the serrate knife-edge. As a result, the cutter of the juicer of the invention has better efficiency because the three blades rotate through different paths and different patterns at different heights.

AMENDMENTS TO THE ABSTRACT:

A cutter of a juicer includes three arcuate blades arranged in equiangular positions and at different horizontal levels. Each blade has a convex side formed with an arc-shaped serrate knife-edge having ~~forming~~ a plurality of serrate knife teeth for reaming foods rapidly when the blades rotate. Each serrate knife-edge has a flat back side and a tail end that form an included angle. The included angles of the three blades are different because of the different curvatures of their respective serrate knife-edges.

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A cutter of a juicer comprising three arcuate blades mounted to a central shaft peripherally, wherein the blades are separately attached to the shaft at different height levels and distributed in equiangular positions, a convex side of each blade is formed with an arc-shaped ~~forming a~~ serrate knife edge, each arc-shaped serrate knife edge has a flat back side and a tail end that form an included angle, and the three included angles of the blades are different.
2. (Currently Amended) The cutter of a juicer according to Claim 1, wherein each blade is attached to the central shaft horizontally.
3. (New) The cutter of a juicer according to Claim 1, wherein the three arc-shaped serrate knife edges have different curvatures.